

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-70. (Cancelled).

71. (Currently Amended): A DNA construct for homologous recombination, comprising:

(A) a first recombination DNA sequence and a second recombination DNA sequence,

wherein the first recombination DNA sequence is homologous to the first endogenous sequence in the genome of a mammalian cell,

the second recombination DNA sequence is homologous to a second endogenous sequence in the genome of a mammalian cell,

and the first and second endogenous sequences are adjacent to a desired insertion site in the genome of the mammalian cell; and

(B) a first insertion DNA sequence and a second insertion DNA sequence, wherein said first insertion DNA sequence encodes a first gene product that does not confer resistance to a selection agent involved in the selection of transformants, [[and]]

said second insertion DNA sequence encodes a second gene product that confers resistance to a selection agent involved in the selection of transformants,

~~wherein~~ the second insertion DNA sequence is downstream of the first insertion DNA sequence,

the second insertion DNA sequence is operatively linked to regulatory elements that direct expression in transformed cells of the second gene product that confers resistance to the selection agent, and

~~wherein the expression product of said DNA construct comprises the second product that confers resistance to a selection agent involved in the selection of transformants, in functional form, and~~

~~wherein~~ the first gene product is part or all of a receptor;

wherein the first and second insertion DNA sequences are located between the first and second recombination DNA sequences in the DNA construct.

72. (Previously Presented): A DNA construct according to claim 71, wherein the receptor is a receptor for an infectious or toxic agent.

73. (Previously Presented): A DNA construct according to claim 71, wherein the receptor is a retinoic acid receptor.

74. (Previously Presented): A DNA construct according to claim 71, wherein the receptor is a 3- β adrenergic receptor.

75. (Previously Presented): A DNA construct according to claim 71, wherein the receptor is an HIV receptor.

76. (Currently Amended): A DNA construct for homologous recombination,
comprising:

(A) a first recombination DNA sequence and a second recombination DNA
sequence,

wherein the first recombination DNA sequence is homologous to a first
endogenous sequence in the genome of a mammalian cell,

the second recombination DNA sequence is homologous to a second
endogenous sequence in the genome of the mammalian cell,

and the first and second endogenous sequences are adjacent to a desired
insertion site in the genome of the mammalian cell; and

(B) a first insertion DNA sequence and a second insertion DNA sequence,
wherein said first insertion DNA sequence encodes a first gene product
that does not confer resistance to a selection agent involved in the selection of
transformants, [[and]]

said second insertion DNA sequence encodes a second gene product that
confers resistance to a selection agent involved in the selection of transformants,

wherein the second insertion DNA sequence is downstream of the first
insertion DNA sequence,

the second insertion DNA sequence is operatively linked to regulatory
elements that direct expression in transformed cells of the second gene product
that confers resistance to the selection agent, and

~~wherein the expression product of said DNA construct comprises the second product that confers resistance to a selection agent involved in the selection of transformants, in functional form, and~~

~~wherein the first gene product is part or all of an interferon;~~

wherein the first and second insertion DNA sequences are located between the first and second recombination DNA sequences in the DNA construct.

77. (Currently Amended): A DNA construct for homologous recombination, comprising:

(A) a first recombination DNA sequence and a second recombination DNA sequence,

wherein the first recombination DNA sequence is homologous to a first endogenous sequence in the genome of a mammalian cell,

the second recombination DNA sequence is homologous to a second endogenous sequence in the genome of the mammalian cell,

and the first and second endogenous sequences are adjacent to a desired insertion site in the genome of the mammalian cell; and

(B) a first insertion DNA sequence and a second insertion DNA sequence,

wherein said first insertion DNA sequence encodes a first gene product that does not confer resistance to a selection agent involved in the selection of transformants, [[and]]

said second insertion DNA sequence encodes a second gene product that confers resistance to a selection agent involved in the selection of transformants,

~~wherein~~ the second insertion DNA sequence is downstream of the first insertion DNA sequence,

the second insertion DNA sequence is operatively linked to regulatory elements that direct expression in transformed cells of the second gene product that confers resistance to the selection agent, and

~~wherein the expression product of said DNA construct comprises the second product that confers resistance to a selection agent involved in the selection of transformants, in functional form, and~~

~~wherein~~ the first gene product is part or all of an interleukin;

wherein the first and second insertion DNA sequences are located between the first and second recombination DNA sequences in the DNA construct

78-101. (Canceled).